

Parts Manual



Hydro Cut

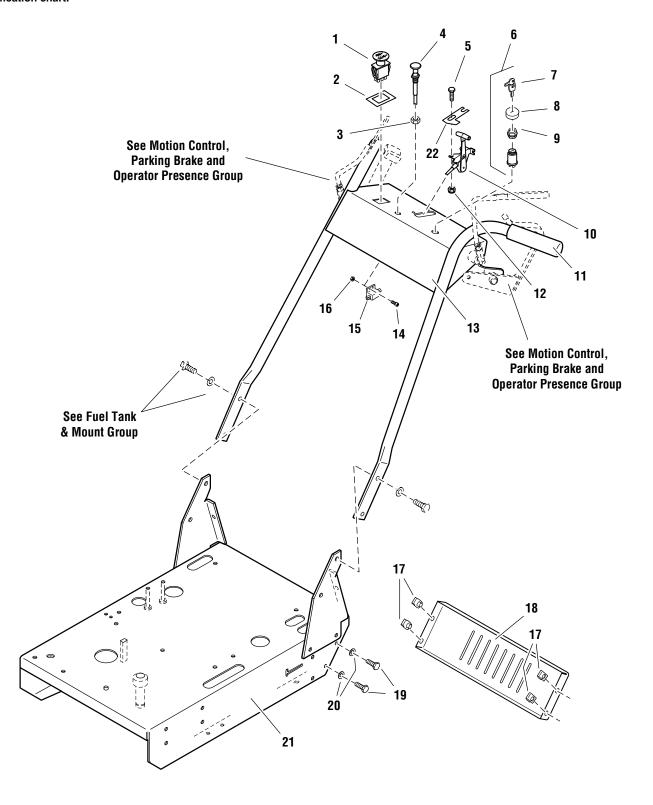
Series Walk-Behind Mowers

13HP Product

Mfg. No. Description

1694562 Hydro Cut, 13HP Kawasaki, 32 inch (CE)

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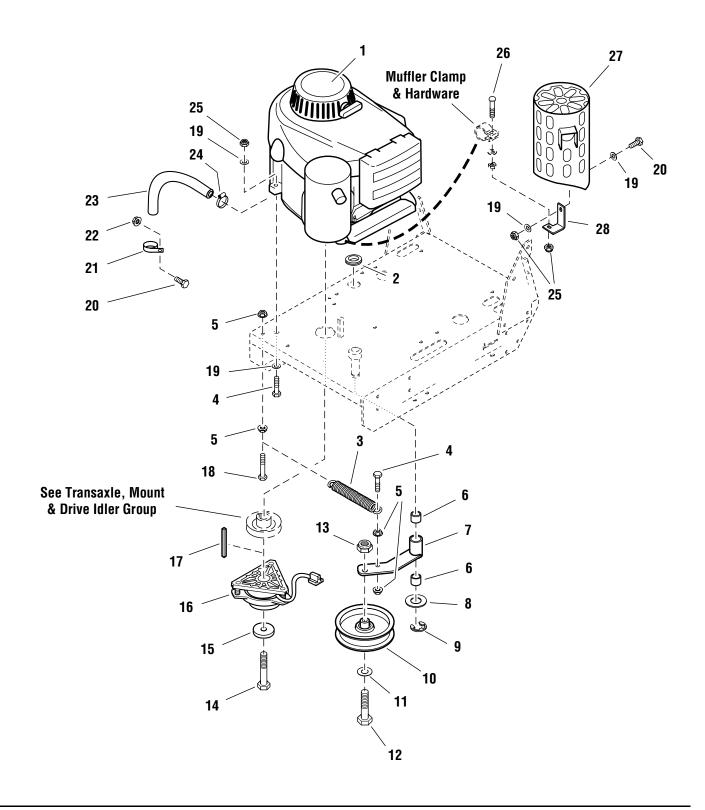
The above parts group applies to the following Mfg. Nos.:

Engine Deck & Handle Bars Group

<u> </u>						
REF NO	PART NO.		QTY. DESCRIPTION			
1	5022180	1	SWITCH, PTO			
2	5022222	1	SWITCH RETAINER RING			
3	5025035	1	NUT, Hex, 3/8-24			
4	5046501	1	CABLE, Choke Control			
5	50250106	2	CAPSCREW, Hex Head, 1/4-20 x 3/4			
6	5021842	1	SWITCH, Ignition, Complete (Includes Ref 7 - 9)			
7	5022789	1	KEY, Ignition, Molded (set of 2)			
8	5022790	1	COVER			
9	5022791	1	PLASTIC NUT			
10	5047629	1	CABLE, Throttle Control			
11	5021841	2	FOAM GRIP			
12	5025095	2	NUT, Hex Nylon Lock, 1/4-20			
13	503847905	1	HANDLE BAR ASSEMBLY, (Orange)			
14	50251794	2	SCREW, Phillips Head, #10-24 x 1/2			
15	5021769	1	SWITCH, NC			
16	5025029	2	NUT, Hex, #10-24			
17	5022308	4	BODY CLIP, 5/16-18			
18	503847735	1	REAR SHIELD, (Orange)			
19	50250116	4	CAPSCREW, Hex Head, 5/16-18 x 3/4			
20	5025155	4	WASHER, 5/16			
21	503848230	1	ENGINE DECK ASSEMBLY, (Orange)			
22	5048474	1	THROTTLE STOP PLATE			

Footnotes

The above parts group applies to the following Mfg. Nos.:



The above parts group applies to the following Mfg. Nos.:

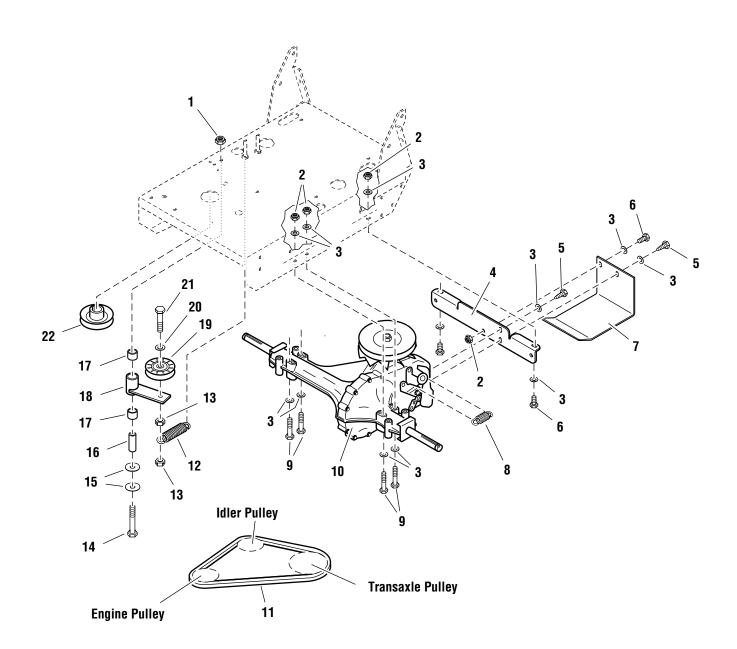
Engine, PTO & Deck Drive Idler Group

<u> ⊏ngine,</u>	FIU & Dec	K DI	rive laier Group	
REF NO	PART NO.		QTY. DESCRIPTION	
1	*	1	ENGINE, 13HP Kawasaki, Model FH381V	
1	50211783	1	FUEL FILTER	
1	50213341	1	OIL FILTER (49065-2078)	
1	*	1	PRE-CLEANER (11013-7016)	
1	*	1	AIR FILTER (11013-7017)	
1	*	1	MUFFLER (49070-7002)	
1	*	1	EXHAUST MANIFOLD (18088-7001)	
1	*	1	MANIFOLD HEAT SHIELD (13271-7022)	
1	*	2	EXHAUST MANIFOLD GASKET (11060-7021)	
1	*	1	RECOIL ASSEMBLY, Complete (49088-7001)	
2	5021379	1	GROMMET	
3	5021103	1	SPRING, Extension	
4	502501112	5	CAPSCREW, Hex Head, 5/16-18 x 1-1/2	
5	5025139	4	NUT, Hex Serrated Flange, 5/16-18	
6	5020876B	2	BUSHING, Brass	
7	503847661	1	DECK DRIVE IDLER ARM, (Orange)	
8	5025160	1	WASHER, 3/4	
9	5020863	1	C-CLIP	
10	5021369	1	IDLER PULLEY	
11	5025158	1	WASHER, 1/2	
12	502501820	1	CAPSCREW, Hex Head, 1/2-20 x 2-1/2	
13	5025098	1	NUT, Hex Nylon Lock, 1/2-20	
14	5047632	1	CRANKSHAFT BOLT, 7/16 x 2-3/4	
15	5042132	1	CLUTCH RETAINER	
16	1717664	1	ELECTRIC CLUTCH	
17	50504073	1	KEY, 1/4 Sq. x 2	
18	502501118	1	CAPSCREW, Hex Head, 5/16-18 x 2-1/4	
19	5025155	7	WASHER, 5/16	
20	50250116	2	CAPSCREW, Hex Head, 5/16-18 x 3/4	
21	5023173	1	CLAMP	
22	5025127	1	NUT, Hex Serrated Flange, 5/16-18	
23	5050857105	1	HOSE, 10-1/2 inch (oil drain)	
24	5021392	1	CLAMP, #6 Hose	
25	5025057	6	NUT, Hex Nylon Lock, 5/16-18	
26	502514614	1	CARRIAGE BOLT, 5/16-18 x 1-3/4	
27	502849338	1	MUFFLER GUARD	
28	502849340	1	BRACKET	

Footnotes

The above parts group applies to the following Mfg. Nos.:

^{*} See your local Kawasaki engine dealer for parts & service.



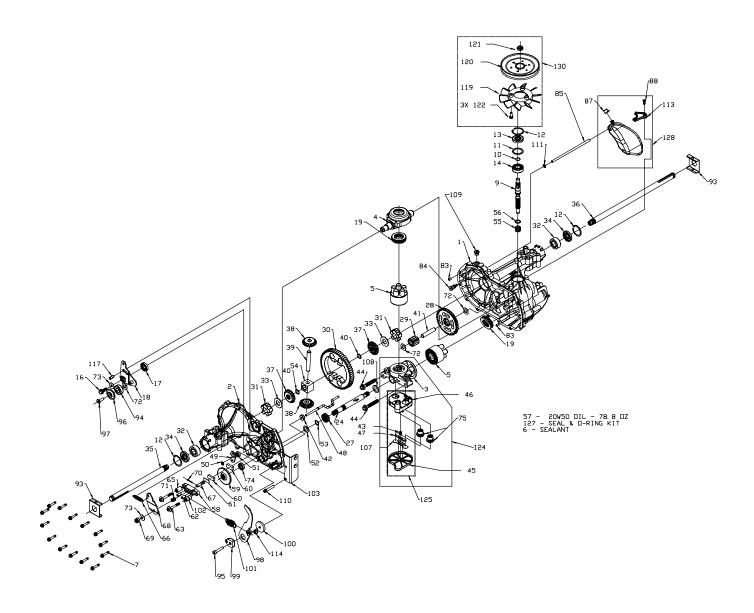
The above parts group applies to the following Mfg. Nos.:

Transaxle, Mount & Drive Idler Group

REF NO	PART NO.		QTY. DESCRIPTION
1	5025096	1	NUT, Hex Nylon Lock, 3/8-16
2	5025057	7	NUT, Hex Nylon Lock, 5/16-18
3	5025155	12	WASHER, 5/16
4	503847582	1	TRANSAXLE BRACE, (Orange)
5	50250596	2	CAPSCREW, Hex Head, Self-Tapping, 5/16-18 x 3/4
6	50250116	3	CAPSCREW, Hex Head, 5/16-18 x 3/4
7	503848312	1	SKID PLATE, (Orange)
8	5022967	1	HYDRO RETURN SPRING
9	502501124	4	CAPSCREW, Hex Head, 5/16-18 x 3
10	5022905	1	HYDROSTATIC TRANSAXLE
11	5023058	1	BELT, Drive
12	5020807	1	SPRING, Extension
13	5025100	2	NUT, Hex Side Lock, 3/8-16
14	502501324	1	CAPSCREW, Hex Head, 3/8-16 x 3
15	5025165	2	WASHER, Fender, 3/8
16	5047716	1	SPACER
17	5020876B	2	BUSHING, Brass
18	503847717	1	TRANSAXLE IDLER ARM, (Orange)
19	5043627	1	IDLER PULLEY ASSEMBLY
20	5025156	1	WASHER, 3/8
21	502501316	1	CAPSCREW, Hex Head, 3/8-16 x 2
22	5047914	1	TRANSAXLE DRIVE PULLEY

Footnotes

The above parts group applies to the following Mfg. Nos.:



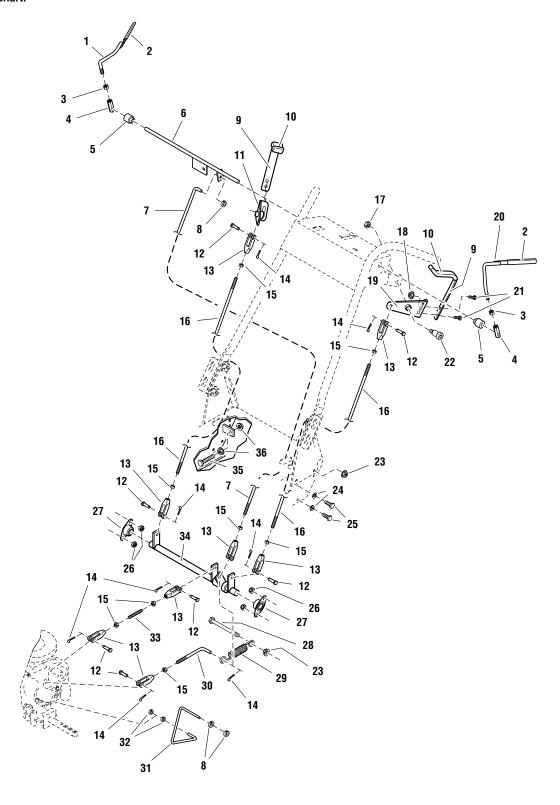
The above parts group applies to the following Mfg. Nos.:

Transaxle SERVICE PARTS

REF NO	PART NO.	C	QTY. DESCRIPTION
6	50229051	10.5	SEALANT
9	50229052	1	SHAFT, INPUT
10	50229053	1	RING - RETAINING
11	50229054	1	SPACER
12	50229055	3	RING - RETAINING
14	50229056	1	BALL BEARING
32	50229057	2	OUTBOARD SLEEVE BEARING
35	50229058	1	AXLE SHAFT - RH
36	50229059	1	AXLE SHAFT - LH
55	502290510	1	SPRING - HELICAL COMPRESSION
56	502290511	1	WASHER
57	502290512	78.8	20W-50 OIL
101	5022967	1	HYDRO RETURN SPRING
119	502290513	1	FAN, 6", 10 BLADE
128	502290514	1	EXPANSION TANK KIT
130	502290515	1	FAN/PULLEY KIT (includes Ref. 119)

Footnotes

The above parts group applies to the following Mfg. Nos.: 1694562 - Hydro Cut



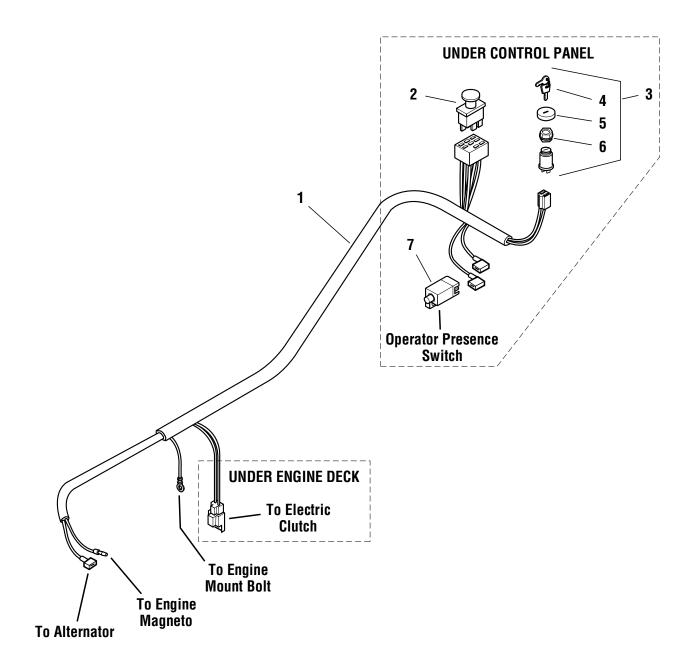
The above parts group applies to the following Mfg. Nos.:

Controls Group

Control	s Group			
REF NO	PART NO.		QTY. DESCRIPTION	
1	503849175	1	OPERATOR PRESENCE HANDLE - RH, (Orange)	
2	5021490	2	VINYL GRIP	
3	5025034	2	NUT, Hex, 3/8-16	
4	5043417	2	ADJUSTER LINKAGE	
5	5045943	2	SHOULDER SPACER	
6	5047723	1	SWITCH ROD	
7	5048327	1	BRAKE ROD	
8	5020047	3	COLLAR, Set, 5/16	
9	503848547	2	THUMB CONTROL LEVER, Complete, (Orange), (Includes Ref No. 10)	
10	5025510	2	FOAM GRIP	
11	503848544	1	PIVOT CONTROL - RH, (Orange)	
12	50252138	7	PIN, Clevis, 5/16 x 1	
13	5020979	8	CLEVIS, Plastic, 5/16-24	
14	50252016	8	PIN, Cotter	
15	5025033	8	NUT, Hex, 5/16-24	
16	5047642	2	THUMB CONTROL ROD	
17	5025100	2	NUT, Hex Side Lock, 3/8-16	
18	5025126	4	NUT, Hex Serrated Flange, 1/4-20	
19	503848545	1	PIVOT CONTROL - LH, (Orange)	
20	503849176	1	OPERATOR PRESENCE HANDLE - LH, (Orange)	
21	50250106	4	CAPSCREW, Hex Head, 1/4-20 x 3/4	
22	5025223	2	SHOULDER BOLT, 1/2 x 1	
23	5025128	2	NUT, Hex Serrated Flange, 3/8-16	
24	5025155	4	WASHER, 5/16	
25	50250116	4	CAPSCREW, Hex Head, 5/16-18 x 3/4	
26	5025057	4	NUT, Hex Nylon Lock, 5/16-18	
27	5021098	2	BEARING, Flange	
28	502501332	1	CAPSCREW, Hex Head, 3/8-16 x 4	
29	5049352	1	SPRING, Extension	
30	5048328	1	BRAKE LINKAGE ROD	
31	5047732	1	DUMP VALVE ROD	
32	5022481	2	COLLAR, Set, 1/4	
33	5047740	1	LINK STUD	
34	503847697	1	CONTROL SHAFT ASSEMBLY, (Orange)	
35	502505514	1	CAPSCREW, Hex Head, TFL, 5/16-18 x 1-3/4	
36	5025127	2	NUT, Hex Serrated Flange, 5/16-18	

Footnotes

The above parts group applies to the following Mfg. Nos.:



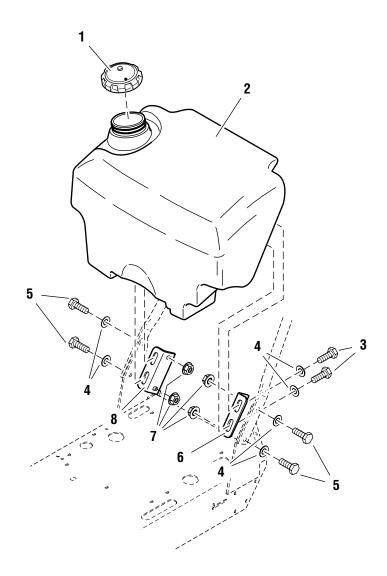
The above parts group applies to the following Mfg. Nos.:

Electrical Group

	-			
REF NO	PART NO.		QTY.	DESCRIPTION
1	5047772	1	WIRE HARN	RNESS
2	5022180	1	SWITCH, P	PTO
3	5021842	1	SWITCH, Ig	gnition, Complete (Includes Ref No. 4-6)
4	5022789	1	KEY, Ignition	on, Molded (set of 2)
5	5022790	1	COVER	
6	5022791	1	PLASTIC N	NUT
7	5021769	1	SWITCH, NO	NC

Footnotes

The above parts group applies to the following Mfg. Nos.: 1694562 - Hydro Cut



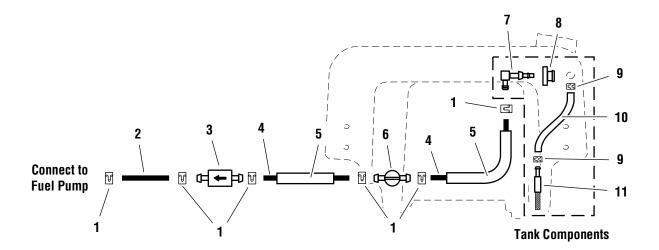
The above parts group applies to the following Mfg. Nos.:

Fuel Tank Group

REF NO	PART NO.		QTY.	DESCRIPTION			
HEF NO	PART NO.		GII.	DESCRIPTION			
1	5022158	1	FUEL T	ANK CAP			
2	5048149	1	FUEL T	ANK			
3	50250136	4	CAPSC	REW, Hex Head, 3/8	-16 x 3/4		
4	5025156	8	WASHE	ER, 3/8			
5	502501310	4	CAPSC	CAPSCREW, Hex Head, 3/8-16 x 1-1/4			
6	503848342	1	FUEL T	ANK MOUNT - LH, (0	Orange)		
7	5025128	4	NUT, H	ex Serrated Flange, 3	3/8-16		
8	503848343	1	FUEL T	ANK MOUNT - RH, (Orange)		

Footnotes

The above parts group applies to the following Mfg. Nos.: 1694562 - Hydro Cut

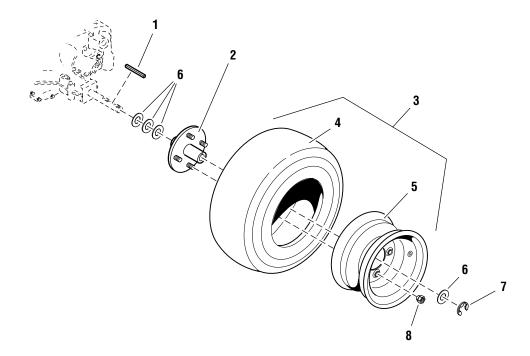


Fuel Tank Supply Group

REF NO	PART NO.		QTY.	DESCRIPTION	
NEP NO	FANT NO.		GII.	DESCRIPTION	
1	5020835	6	CLAMF	, Hose	
2	50508317	1	HOSE,	7 inch (supplied with	engine)
3	50211783	1	FUEL F	ILTER	
4	505083119	2	HOSE,	19-1/2 inch	
5	505083318	2	WIRE L	OOM, 18 inch	
6	5021235	1	VALVE	, FUel Shut-Off	
7	5023061	1	ELBOV	/ FITTING	
8	1726400	1	GROM	MET	
9	5023069	2	HOSE	CLAMP	
10	505092520	1	HOSE,	20 inch	
11	5023067	1	SCREE	N FITTING	

Footnotes

The above parts group applies to the following Mfg. Nos.:



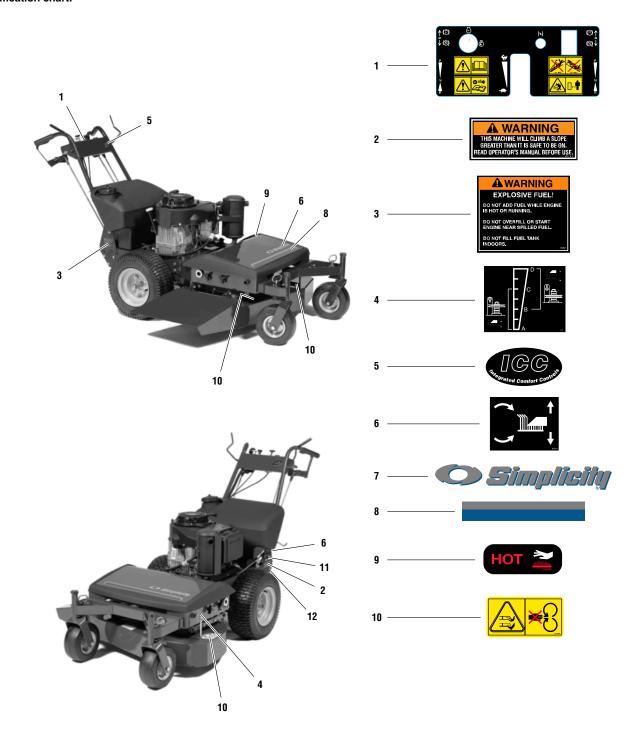
The above parts group applies to the following Mfg. Nos.:

Wheel & Tire Group

1 5048409 2 KEY, 3/16 2 5020792S 2 DRIVE HUB 3 5023104 2 WHEEL & TIRE ASSEMBLY, 16 x 6.5 x 8, Complete (Includes Ref 4 & 5) 4 50231042 2 TIRE, 16. x 6.5 x 8 5 50231041 2 WHEEL ASSEMBLY, 8 x 5.38 6 50255203 8 SHIM 7 5020863 2 C-CLIP 8 5020601 8 LLIG NUT	REF NO	PART NO.		QTY.	DESCRIPTION	
3 5023104 2 WHEEL & TIRE ASSEMBLY, 16 x 6.5 x 8, Complete (Includes Ref 4 & 5) 4 50231042 2 TIRE, 16. x 6.5 x 8 5 50231041 2 WHEEL ASSEMBLY, 8 x 5.38 6 50255203 8 SHIM 7 5020863 2 C-CLIP	1	5048409	2	KEY, 3/1	6	
4 50231042 2 TIRE, 16. x 6.5 x 8 5 50231041 2 WHEEL ASSEMBLY, 8 x 5.38 6 50255203 8 SHIM 7 5020863 2 C-CLIP	2	5020792S	2	DRIVE H	UB	
5 50231041 2 WHEEL ASSEMBLY, 8 x 5.38 6 50255203 8 SHIM 7 5020863 2 C-CLIP	3	5023104	2	WHEEL	& TIRE ASSEMBLY	, 16 x 6.5 x 8, Complete (Includes Ref 4 & 5)
6 50255203 8 SHIM 7 5020863 2 C-CLIP	4	50231042	2	TIRE, 16	. x 6.5 x 8	
7 5020863 2 C-CLIP	5	50231041	2	WHEEL	ASSEMBLY, 8 x 5.3	8
	6	50255203	8	SHIM		
8 5020601 8 LUG NUT	7	5020863	2	C-CLIP		
0 0020001 0 2001101	8	5020601	8	LUG NU	Γ	

Footnotes

The above parts group applies to the following Mfg. Nos.: 1694562 - Hydro Cut



The above parts group applies to the following Mfg. Nos.:

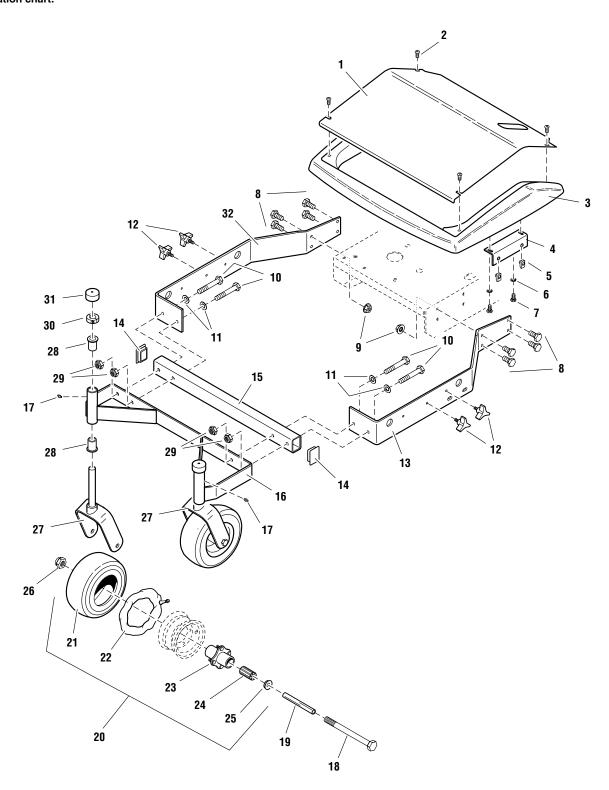
Decals - Brand, Model, Safety & Instruction

REF NO	PART NO.		QTY. DESCRIPTION
1	5049317	1	DECAL, Control Panel
2	5021818	1	DECAL, Warning Machine Climb
3	5048261	1	DECAL, Warning Explosive Fuel
4	5049318	1	DECAL, Deck Height, Pulley Position
5	5048228	1	DECAL, ICC
6	5047778	1	DECAL, Cut Height Adjust
7	1722551	1	DECAL, Simplicity, Blue & Silver, Icon
8	5048482	1	DECAL, Stripe, Blue and Grey
9	1704473	1	DECAL, Hot
10	1704277	1	DECAL, Danger, Chute In Place, Hand Under Deck
11	*	1	MODEL/SERIAL TAG (Not serviced)
12	*	1	DECAL, I.D. Plate

Footnotes

The above parts group applies to the following Mfg. Nos.:

^{*} Not a service part.



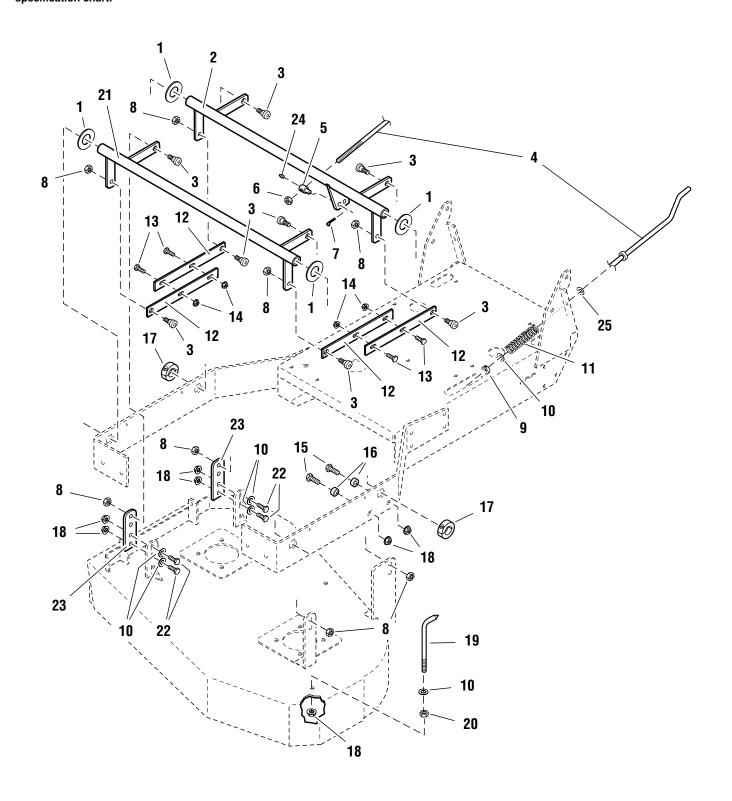
The above parts group applies to the following Mfg. Nos.:

32 inch Mower Deck - Frame, Caster & Shield

REF NO	PART NO.		QTY. DESCRIPTION
1	503848145	1	SHIELD INSERT, (Orange)
2	50252994	4	SCREW, Allen Head, 1/4-20 x 1/2
3	5048150	1	GUARD, Mower Deck
4	503848353	2	SHIELD MOUNT BRACKET, (Orange)
5	5022308	4	BODY CLIP, 5/16-18
6	5025169	4	LOCKWASHER, 1/4
7	50250106	4	CAPSCREW, Hex Head, 1/4-20 x 3/4
8	50250138	8	CAPSCREW, Hex Head, 3/8-16 x 1
9	5025128	8	NUT, Hex Serrated Flange, 3/8-16
10	502501320	4	CAPSCREW, Hex Head, 3/8-16 x 2-1/2
11	5025156	4	WASHER, 3/8
12	5022319	4	KNOB
13	503847648	1	FRAME RAIL - LH, (Orange)
14	5022098	2	PLASTIC CAP
15	503848194	1	CROSS TUBE, (Orange)
16	503848969	1	CASTER MOUNT FRAME, Complete, (Orange) (Includes Ref. No. 17 & 28)
17	5020095	2	GREASE FITTING, 1/4-28
18	502501744	2	CAPSCREW, Hex Head, 1/2-13 x 5-1/2
19	5041657	2	AXLE, Caster
20	5021181S	2	WHEEL & TIRE ASSEMBLY, Silver, 9 x 3.5 x 4, Complete (Includes Ref. No. 21 - 25)
21	50211811	2	TIRE, Front, 9 x 3.5 x 4
22	50211812	2	TUBE, for 9 x 3.5 x 4 Tire
23	5021181S3	2	HUB & BEARING ASSEMBLY, Complete, Silver (Includes Ref. No. 24 & 25)
24	5021182	2	BEARING, Roller (1 per tire)
25	5021043	4	RETAINER, Bearing (2 per tire)
26	5025056	2	NUT, Hex Nylon Lock, 1/2-13
27	503848172	2	CASTER YOKE, (Orange) (Use with Ref. No. 16, Part No. 503848969)
28	5020823	4	BUSHING, Flange
29	5025096	4	NUT, Hex Nylon Lock, 3/8-16
30	5010114	2	COLLAR, Split, 3/4
31	5023274	2	VINYL CAP
32	503847649	1	FRAME RAIL - RH, (Orange)

Footnotes

The above parts group applies to the following Mfg. Nos.:



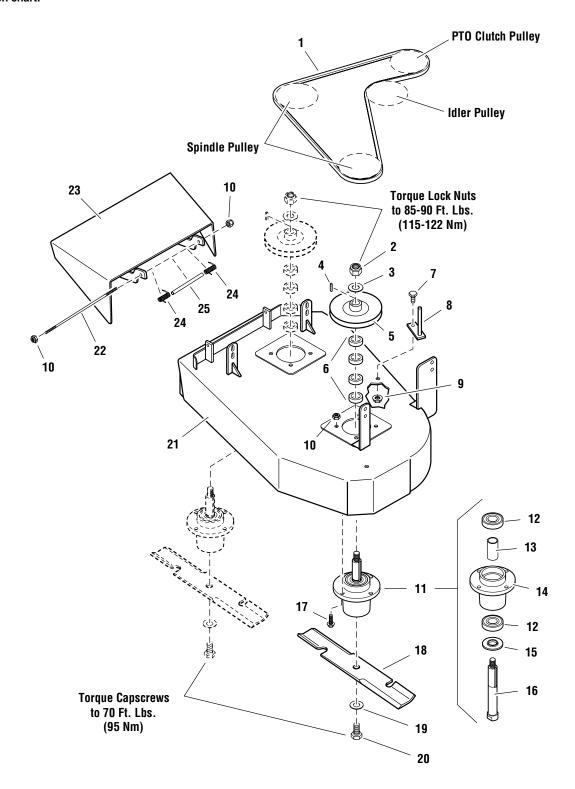
The above parts group applies to the following Mfg. Nos.:

32 inch Mower Deck - Height Adjustment

oz men mener zeek meight najaetment						
REF NO	PART NO.		QTY. DESCRIPTION			
1	5025162	4	WASHER, 1 inch			
2	503847682	1	DECK LIFT PIVOT - REAR, (Orange)			
3	5025356	8	SHOULDER BOLT, 3/8-16 x 1/2 x 3/8			
4	5047655	1	HEIGHT ADJUST ROD			
5	5048526	1	LINKAGE ADJUSTER			
6	5025100	1	NUT, Hex Side Lock, 3/8-16			
7	50252016	1	PIN, Cotter			
8	5025046	8	NUT, Hex Top Lock, 3/8-16			
9	5010546	1	COLLAR, Set, 3/8			
10	5025156	6	WASHER, 3/8			
11	5022645	1	SPRING, Compression			
12	503847710	4	DECK ADJUST LINK, (Orange)			
13	50250118	4	CAPSCREW, Hex Head, 5/16-18 x 1			
14	5025139	4	NUT, Hex Serrated Flange, 5/16-18			
15	502501310	2	CAPSCREW, Hex Head, 3/8-16 x 1-1/4			
16	5044933	2	SPACER			
17	5048549	2	COLLAR, Double Split, 1 inch			
18	5025128	7	NUT, Hex Serrated Flange, 3/8-16			
19	5047737	1	CUT HEIGHT INDICATOR			
20	5025034	1	NUT, Hex, 3/8-16			
21	503847681	1	DECK LIFT PIVOT, Front, (Orange)			
22	50250136	4	CAPSCREW, Hex Head, 3/8-16 x 3/4			
23	503848439	2	HANGER PLATE, (Orange)			
24	5020095	1	GREASE FITTING, 1/4-28			
25	5048548	1	WASHER, Nylon, 3/8			

Footnotes

The above parts group applies to the following Mfg. Nos.: 1694562 - Hydro Cut



The above parts group applies to the following Mfg. Nos.:

32 inch Mower Deck - Housing, Arbors & Blades

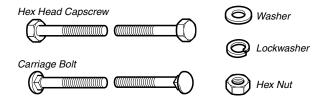
oz mon moner beak Trousing, Arbara a blades						
REF NO	PART NO.		QTY. DESCRIPTION			
1	5022918	1	BELT, Arbor			
2	5025319	2	NUT, Hex Nylon Lock, 5/8-18			
3	5025318	2	WASHER, Spring, 5/8			
4	50504071	2	KEY, 1/4 Square x 1			
5	5047638	2	SPINDLE PULLEY			
6	5047725	8	SPACER			
7	50250138	1	CAPSCREW, Hex Head, 3/8-16 x 1			
8	503847777	1	BELT GUIDE, (Orange)			
9	5025126	1	NUT, Hex Serrated Flange, 3/8-16			
10	5025057	10	NUT, Hex Nylon Lock, 5/16-18			
11	5047640	2	SPINDLE ASSEMBLY, Complete (Includes Ref. No. 12-16)			
12	50463635	4	BEARING, Ball			
13	50463634	2	SPACER, Bearing			
14	50463631	2	SPINDLE HOUSING			
15	50463633	2	TRASH SHIELD			
16	50476402	2	SPINDLE SHAFT			
17	5023156	8	CAPSCREW, Hex Flange Head, 5/16-18 x 1-1/4			
18	5020843	2	MOWER BLADE, 16-1/4			
19	5025159	2	WASHER, USS, 5/8			
20	502532014	2	CAPSCREW, Hex Head, 5/8-11 x 1-3/4			
21	503847576	1	MOWER DECK HOUSING, (Orange)			
22	5045914	1	CHUTE PIVOT ROD			
23	503847724	1	DISCHARGE CHUTE, (Orange)			
24	1723938	2	SPRING, Torsion			
25	5045638	1	SPRING SPACER			

Footnotes

The above parts group applies to the following Mfg. Nos.:

Hardware Identification & Torque Specifications

Common Hardware Types

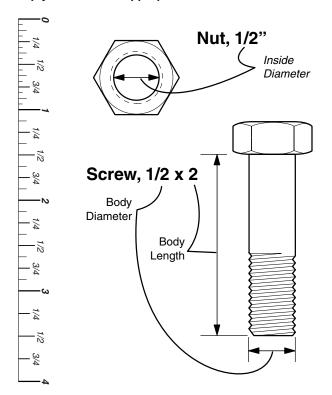


Standard Hardware Sizing

When a washer or nut is identified as 1/2", this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch; if a second number is present it represent the *threads per inch*

When bolt or capscrew is identified as 1/2 - 16 x 2", this means the *Nominal size*, or *body diameter* is 1/2 inch; the second number represents the *threads per inch* (16 in this example, and the final number is the *body length* of the bolt or screw (in this example 2 inches long).

The guides and ruler furnished below are designed to help you select the appropriate hardware and tools.



Torque Specification Chart

FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)

Hardware Grade	Ma	vo arks rade 2	SAE Grade 5		SAE Grade 8	
Size Of Hardware	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.
8-32	19	2.1	30	3.4	41	4.6
8-36	20	2.3	31	3.5	43	4.9
10-24	27	3.1	43	4.9	60	6.8
10-32	31	3.5	49	5.5	68	7.7
1/4-20	66	7.6	8	10.9	12	16.3
1/4-28	76	8.6	10	13.6	14	19.0
5/16-18	11	15.0	17	23.1	25	34.0
5/16-24	12	16.3	19	25.8	27	34.0
3/8-16	20	27.2	30	40.8	45	61.2
3/8-24	23	31.3	35	47.6	50	68.0
7/16-14	30	40.8	50	68.0	70	95.2
7/16-20	35	47.6	55	74.8	80	108.8
1/2-13	50	68.0	75	102.0	110	149.6
1/2-20	55	74.8	90	122.4	120	163.2
9/16-12	65	88.4	110	149.6	150	204.0
9/16-18	75	102.0	120	163.2	170	231.2
5/8-11	90	122.4	150	204.0	220	299.2
5/8-18	100	136	180	244.8	240	326.4
3/4-10	160	217.6	260	353.6	386	525.0
3/4-16	180	244.8	300	408.0	420	571.2
7/8-9	140	190.4	400	544.0	600	816.0
7/8-14	155	210.8	440	598.4	660	897.6
1-8	220	299.2	580	788.8	900	1,244.0
1-12	240	326.4	640	870.4	1,000	1,360.0

NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- 2. Recommended seating torque values for locknuts:
 - a. for prevailing torque locknuts use 65% of grade 5 torques.
 - for flange whizlock nuts and screws use 135% of grade 5 torques.
- 3. Unless otherwise noted on assembly drawings, all torque values must meet this specification.

Wrench & Fastener Size Guide



1/4" Bolt or Nut Wrench—7/16"



5/16" Bolt or Nut Wrench—1/2"



3/8" Bolt or Nut Wrench—9/16"



7/16" Bolt or Nut Wrench (Bolt)—5/8" Wrench (Nut)—11/16"



1/2" Bolt or Nut Wrench—3/4"

